

TAB E: SECURITY GUIDANCE

Preface.

This guidance was derived from 40 CFR 112 of 17 July 2002, and tailored to assist Navy and Marine Corps installations in the interpretation and implementation of SPCC requirements, and in the preparation of installation SPCC Plans. Reference citations from the regulation are included where appropriate, and can be easily distinguished from guidance text by *italic* font located between brackets (e.g., [*§ 112.7(b)*]).

The following section includes guidance on implementation of SPCC Plan requirements pertaining specifically to security. Basic security measures, at minimum, must be provided for facilities that store, transfer, distribute or consume oil.

An SPCC Plan must be certified by a PE, whose endorsement indicates the Plan not only meets regulatory requirements, but is also adequate for the facility and has been prepared in accordance with applicable industry standards. Therefore, when following the recommendations contained in this document, it should be understood that the minimum requirements described herein may not be adequate for each facility. Rather, good engineering judgment must be exercised by the certifying PE.

Refer to Section 2 of this document for the sequential section-by-section discussion of the regulation in the order of Part 112.

Security Guidance for SPCC Requirements.

E.1 Applicability.

Navy and Marine Corps installations that meet either of the following criteria are subject to 40 CFR 112 (providing the installation stores, transfers, distributes, or consumes oil and oil products that could reasonably be expected to reach navigable waters if spilled or released) and must prepare an SPCC Plan [*§ 112.1*]:

- The installation's underground oil storage capacity exceeds 42,000 gal (excluding completely buried storage tanks subject to all of the technical requirements of 40 CFR 280).
- The installation's aggregate aboveground oil storage capacity (including all tanks, containers, and operating equipment 55 gal or greater in capacity) exceeds 1,320 gal.

At an installation where any of the above scenarios apply, bulk storage containers and oil-filled electrical and other operating equipment used to store oil must be included in an installation SPCC Plan if they are 55 gal or greater. Basic security measures, at minimum, must be provided for these containers and equipment.

E.2 Facility Diagram and Site-Specific Drawings.

The location and type of oil (and name, if appropriate) of each container must be depicted on a facility diagram or set of diagrams, along with all associated transfer stations and piping [*§ 112.7(a)(3)*].

Site-specific drawings are not explicitly required in Part 112; in fact, for many small owner/operators, a facility diagram may be just as detailed as any site-specific drawing, and therefore be completely

adequate. However, most Navy and Marine Corps installations are quite sizeable, thus the scale of a facility diagram (or even a set of facility diagrams) may preclude the possibility of depicting the required or useful details of individual oil storage locations throughout the installation. Consequently, it may be desirable to include site-specific drawings in subsequent sections of the SPCC Plan (i.e., in addenda, attachments, appendices, 'write-ups', etc.) to better illustrate these details. A sample site-specific drawing has been included in Section 3 Tab A as Figure A-1.

If site-specific sections are included in the SPCC Plan, depict the security features (e.g., fencing, gates, valve locks, starter control locks, lighting, etc.) in the drawings (see Section 3 Tab A, Figure A-1). It will still be necessary to describe the security measures in the site-specific section. If site-specific sections are not included in the SPCC Plan, discuss how the security requirements are met throughout the installation (e.g., include tables or matrices listing the security attributes of each site or bulk storage container).

E.3 Security.

Specific security measures pertaining to fencing, valve locking, pump starter control locking, capping of piping connections not in use, and lighting must be in place at oil storage facilities [§ 112.7(g)].

Navy and Marine Corps installations are typically surrounded by secure fencing, and are adequately patrolled by security personnel. With regard to access, this provides sufficient security for many sites and tanks. However, it is often necessary to provide additional security for critical or large oil storage locations and oil-filled electrical equipment; these sites or tanks should be individually fenced and secured. Fencing helps to deter vandals, and thus prevent the discharges they might cause. Enhanced security measures, such as taller fencing or barbed wire, should be considered at sites where security concerns are paramount.

The master flow and drain valves, and any other valve permitting direct outward flow of the container's contents to the surface, must remain closed and have adequate security measures in place to ensure they remain closed. The preferred approach is to utilize manual locks for valves that are not automatically controlled.

Pump starter controls must be locked in the off position, with access restricted to authorized personnel only. This prevents the accidental or intentional (i.e., by vandals) opening of the starter controls and potential resulting discharges.

Piping should be securely capped or blank-flanged when not in use for an extended period of time (i.e., six months or more).

Adequate lighting must be provided to assist in the discovery of discharges occurring during hours of darkness, and assist in prevention of discharges occurring through acts of vandalism. If street lighting or general area lighting is not in close enough proximity to meet these conditions, dedicated lighting should be installed at the site or mounted nearby. Enhanced security measures, such as perimeter lighting or security cameras, should be considered at sites where security concerns are paramount.

Note that there may be defensible reasons (e.g., spatial limitations, safety concerns, costs or economic impacts) why an installation might not be able to satisfy a security requirement. In such instances, a clear explanation of why such measures are not practicable must be provided in the Plan. The reason for nonconformance must be justified, and alternate methods of 'equivalent environmental protection' must be provided (refer to § 112.7(a)(2)).

Chapter 9 of the Spill Prevention Guidance Document (NFESC, 1998) contains discussion and provides guidance on security including fencing, gates, equipment and building security, lighting, and security patrols [<http://enviro.nfesc.navy.mil/ps/spillprev>].

Cost Information

Information on several security measures and related items is included in Section 4 Appendix A. Measures and items discussed include:

- Fencing: \$20 - \$30 per linear foot (per PWD).
- Valve lockouts: \$18 - \$70 for 1" - 13" lockouts (per vendors).
- Padlocks: \$5 - \$20 per padlock (per vendors).
- Lighting: \$75 - \$650 for fixtures, \$480 - \$1,335 for aluminum poles, or \$4,395 - \$5,146 installed for fixtures and poles (per National Construction Estimator).

